

A BUENOA OF SOUTHWEST UNITED STATES
AND MEXICO
(Hemiptera)

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The University of Kansas Science Bulletin, Vol. XVIII, page 342, and Plate LIV, No. 5, published in April 1928, figured the genital claspers and spine of the new species, *Buenoa arizonis* Bare, with the note that a full description would follow. Since that date we have secured and studied many more specimens. These include some from Arizona, Southern California, Lower California, and the State of Colima, Mexico. The following notes give the more complete description.

BUENOA ARIZONIS Bare

Size: ♂ ♂, length 8.5 to 9 mm.; width 2.4 to 2.6 mm.
♀ ♀, length 8 to 8.9 mm., width 2.6 to 2.9 mm.

Color: Eyes dark; anterior part of scutellum and meta-thorax showing through elytra very dark or amber-colored; *hind margin of scutellum yellowish*; notocephalon, prothorax, legs, and underside of body mostly yellowish or straw-colored; ventral part of abdomen except outer portions of connexiva and median carina dark; tips of front and intermediate tarsal claws black; considerable red coloring about wing attachments.

Structural characteristics: Head with eyes slightly narrower than pronotum at hind margin. Notocephalon slightly sulcate in some specimens, narrowest ventrad of vertex, widest between vertex and synthyliptosis which are subequal in width. *Tylus full and knob-like as seen in profile, a slight depression or division at the point of the knob in the males.* Synthyliptosis: vertex: base of tylus :: 9: 9: 12 in ♂; in ♀ as 9: 11: 12.

Pronotum with slight knob-like prominence at anterior angle; of smooth swollen appearance in ♀; distinctly tricarinata in ♂; hind margin very slightly sinuate; one-fifth wider than long in ♂; nearly one-half wider than long in ♀.

Scutellum about one-eleventh shorter than pronotum; relatively somewhat shorter in ♀ than in the ♂; anterior portion smooth and shining black.

Pronotum: scutellum: claval orifice: elytral suture: membrane :: 6.5: 5: 1.2: 6: 9 in ♂, and :: 5: 5.5: 1.2: 7: 9 in ♀.

Seventh abdominal tergite of ♂ with lateral (sinistral) spine as in Fig. 7, fairly long and slender.

Gonapophyses of ♂ as in Figs. 5 and 6.

Pleurite of second abdominal segment in ♂ with glandular opening darkly chitinized.

Foreleg: Coxa of ♂ with usually one large stridular seta and a setal vortex near base; trochanter angulate; femur with a small setal comb at distal cephalad angle, on lateral face about eighteen crib-forming setæ; on mesal face in ♂, stridular area and setæ as shown in Figs. 1 and 2. Tibial prong in ♂ with about fifty-one setal teeth. Tarsus with setal comb near base of digitate black-tipped claws.

Middle leg: Distal half of coxa coated with many fine setæ; on mesal face of femur a distinct row of forty-five to fifty tooth-like setæ, besides the many large crib forming setæ; at distal end of tibia two setal combs of about five setæ in each; also a setal comb at distal end of second tarsal segment opposite the somewhat falciform claws; inner face of tarsus in both segments armed with short setal claws arranged mostly in groups of three.

Hind leg: *Caudal margin of femur armed with two rows of short dentate setæ, about seventy in upper or dorsad row and sixty in lower or ventrad row; setal comb almost circumscribing distal end of tibia; setal comb about one-third distance from proximal end of first tarsal segment and between the two rows of long swimming setæ on mesal face.*

Relative lengths of parts of legs vary, but are nearly as follows:

	Front Femora	Middle Femora	Hind Femora	
For ♂ ♂	4.9	7	10.8	
For ♀ ♀	4.5	8	11	
	Femur	Tibia	Tarsus 1	Tarsus 2
Front leg.....	4.5	6	2.8	1.7
Middle leg.....	8	6.6	3	2
Hind leg.....	11	10.5	4	3.5

Type locality: Superstition Mountains, Arizona (Pinal County). See Tech. Bull. 7, Univ. of Arizona Agr. Exp. Sta., pp. 148-9.

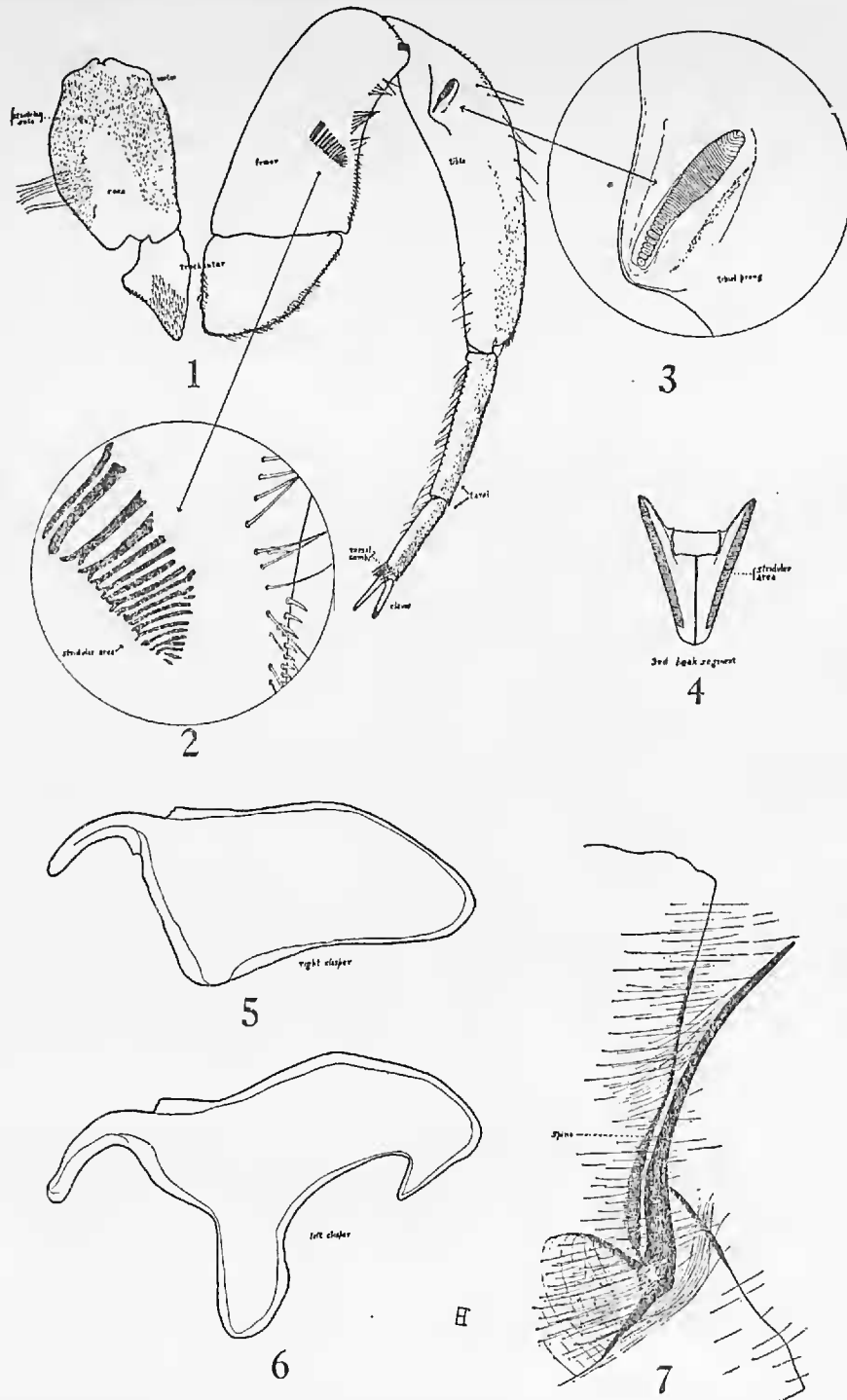


Fig. 1. Foreleg, left: Low power micro., from holotype, slides Nos. 1 and 2 (x 22).

Fig. 2. Stridular area of front femur: High power micro., from holotype, slide No. 2 (x 94).

Fig. 3. Tibial prong showing stridular detail: High power micro., from holotype, slide No. 2 (x 94).

Fig. 4. Third beak segment with prongs bearing stridular areas: Low power micro., from paratype No. 3, slide No. 1 (x 22).

Fig. 5. Right genital clasper: High power micro., from holotype, slide No. 5 (x 94).

Fig. 6. Left genital clasper: High power micro., from holotype, slide No. 5 (x 94).

Fig. 7. Sinistral spine of seventh abdominal tergite: High power micro., from holotype, slide No. 4 (x 94).

Types: Described from 151 specimens, 52 ♂♂ and 99 ♀♀. Holotype ♂, allotype ♀, and paratypes (3 ♂♂ and 10 ♀♀) Nos. 1-3, 5-13, and 92, from Superstition Mountains (Pinal County), Arizona, dated November 7, 1922, and collected by P. A. Glick. The holotype is made up in five slide mounts of which Nos. 4 and 5 are those from which the original drawings in the University of Kansas Science Bulletin, Vol. XVIII, Plate LIV, No. 5, were made. Some of the paratypes are made up in slide mounts as follows: No. 1 (2 slides); No. 2 (2 slides); No. 3 (pinned specimen and 1 slide); No. 6 (1 slide); No. 14 (2 slides); No. 92 (2 slides). Paratypes, 39 ♂♂ and 79 ♀♀, Nos. 4, 14-17, 30-91, 93-143, from Santa Cruz, Cochise, and Gila counties, Arizona; and Santa Rita Mountains, in Pima County, Arizona; dates July 25, 29, and August 4, 5, 6, 24, 1927; collectors, R. H. Beamer, P. A. Radio, and L. D. Anderson. Paratypes, 3 ♂♂ and 5 ♀♀, Nos. 18-25, Boboquivaria Mountains, Pima County, Arizona; (1898?); collector, F. H. Snow. Paratypes, 3 ♂♂, Nos. 144-146, Warsaw, Arizona, December 4, 1893, U. S. National Museum, Accession No. 28058. Paratype, 1 ♂, No. 148, Catalina Mountains, Arizona, "18/4," Sabino Canyon, Hubbard collection. Paratypes, 1 ♂ and 3 ♀♀, Nos. 26-29, Escondido Bay, Baja California, June 14, 1921; collector, J. C. Chamberlin; ex. Coll. Cal. Acad. Sciences. Paratypes, 1 ♀, No. 147, State of Colima, Mexico, L. Conradt Coll. Paratype, 1 ♂, No. 149, Lower California, P. R. Uhler collection. (This specimen also bears the label, "*Anisops platycnemis* Fieber, det. Uhler.")

Location of types: In University of Kansas, Snow collection: Holotype, allotype, and paratypes, Nos. 18-25, 30-91, 93-143. In author's collection: paratypes, Nos. 1-17, 28, and 92. In California Academy of Sciences collection: paratypes, Nos. 26, 27, and 29. In U. S. National Museum: paratypes, Nos. 144-149.

Comparative notes: Easily distinguished from similar species by distinctive coloration of scutellum, the number of setæ on hind femora, and especially by the knob-like projection of the tylus. *Buena antigone* Kirk. and *Buena carinata* Champion are similar, but both have fewer setæ on the hind femora and lack the knob on the tylus.